(IJASSH) 2016, Vol. No. 2, Jul-Dec **e-ISSN: 2455-5150, p-ISSN: 2455-7722**

FARMER'S RIGHTS IN INDIA

Rajshree Chandra

Associate Professor of Political Science, Janki Devi Memorial College, Delhi University

Development and law have an intimate connection. Fuelled by ideas about innovation, progress in science and technology, and economic growth, particular development strategies are stabilised and institutionalised in the law. In a sense law becomes an exercise in line drawing, creating domains of legality, propriety, lawful relations, subject positions, delineating realms and people that are inside them as well as those that are outside. Farmers who commit suicide would seem to be, prima facie, "outside" of law, excluded from the protections granted to lawful relations. Ironically, this is not so. The farmers who are ending their lives (even as we speak today) are, paradoxically, those that fall within the protective purview of law – The Protection of Plant Varieties and Farmers Rights Act (PPVFRA), 2001. It is the perverse disjuncture of the two theatres – of legal entitlement and of extreme existential marginality – that drives this study of rights and that also forms the raison d' etre for the title "the curious case of farmers' rights in India".

In 2001, India had become one of the first countries to legislate on farmers' rights, passing the Protection of Plant Varieties and Farmers' Rights Act. It was the world's first explicit legislation on farmers' rights, inaugurating what many saw as a new chapter in the discourse of rights and a template for such legislations worldwide. One of the stated intents of this Act was to protect the small farmer, his rights and threatened livelihood in the face of the growing global integration of agriculture after 1995, when India became a party to the Agreement on Trade-Related Aspects of International Property Rights (the TRIPS agreement).

The concurrence of these two developments – farmers' suicides and farmers' rights – is indeed striking, and rather perversely so. Rights are mandated to protect, to shield, to provide both symbolic and material resources to negotiate interests and better conditions. And yet suicides have continued unabated in all the intervening years, signalling the impotence of legal recourse in the face of deep structural integration with globalised networks that worsen marginalities of small farmers.[1]

[1] A number of studies on farmers' suicides indicate that the majority of the farmers entrapped are small farmers who have become increasingly marginalised as agriculture has become more commercialised. B.B. Mohanty's (2005) study of the Vidarbha and Yavatmal districts, A.R.Vasavi's (2004) study of Karnataka, TISS Report (Dandekar et al, 2005), S. Mishra's study (2006) of Maharashtra all indicate that the majority of these farmers were small farmers with landholdings ranging from two to five hectares. These states are belts where commercial agriculture has intensified.

What is also surprising, as well as apparently contradictory, is that most suicides have occurred in affluent states with high growth rates and longer periods of economic development – Maharashtra, Andhra Pradesh, Punjab and Karnataka. A number of ethnographic studies, reports and case studies draw our attention to a complex, imbricated mix of structural, global, macro and micro causes; one feature that stands out is the fact that most victims were undertaking the cultivation of crops primarily for the market.[2] The four states – Andhra Pradesh, Maharashtra, Karnataka and Madhya Pradesh – which have recorded 68% of the farmers' suicides, are predominantly cotton-growing states with rain-fed conditions.[3] Maharashtra infamously tops the list, and within Maharashtra the districts of Buldana, Akola, Washim, Amravati, Yavatmal and Wardha in the Vidharbha region.[4] Farm suicides in Maharashtra rose sharply by 13.4% from 3,337 in 2011 to 3,786 in 2012 – the worst annual increase in seven years. It also brings Maharashtra's tally since the NCRB began recording farm data in 1995 to a staggering 57,604 farmers' suicides.[5]

On 6 September, 2007, the journalist P. Sainath, whose work, reportage and activism on the distress of farmers has been steadfast, delivered a lecture to members of the Parliament warning of an emergency in India's rural areas. 'We as a nation are in the worst agrarian crisis in four decades… The crisis is so deep, so advanced that...[i]t is a national crisis and we need to respond to it as such… The suicides are merely, however tragic, just a symptom and not the disease. They are a consequence, not the process.'[6]

---

[2] B.B. Mohanty's 2004, 2005; TISS Report (Dandekar et al, 2005); S. Mishra 2006; A.R.Vasavi, *Shadow Space* (Gurgaon: Three Essays Collective, 2012), 73

[3] P.Sainath, "*Farmers' suicide rates soar above the rest"*, The Hindu, May 18, 2013; The Sanhati Collective, "Farmers' Suicides in India: A Disaster of Epic Proportions", 15 Jan (2012). Available at http://sanhati.com/excerpted/4504/ (last visited 14 June, 2014) ; B. Mohanty, "We are like the living dead: Farmer Suicides in Maharashtra, Western India", *J Peasant Stud* 2005, 32:243-276; R.S. Deshpande, Arora S (Eds): *Agrarian Crisis and Farmer Suicides*. New Delhi: Sage; 2010.

[4] Conversations and email exchanges with Kishor Tiwari of the VJAS. He revealed that before 1999 farmers' suicide was not heard of in Vidarbha. What triggered the suicides was the introduction of Bt Cotton in 2004. "The total cultivation cost jumped from Rs.5000/acre to Rs.10,000/acre as against conventional cotton farming. At the same time, the cotton bonus (Rs.500/quintal advance bonus normally tagged on to the minimum support price) was withdrawn by the state government and that year the Bt cotton crop failed. This triggered the spate of suicides. He terms these suicides "mass genocide".

[5] S. Mishra, "Farmers' Suicide in Maharashtra" Econ Pol Wkly 41:1538-1545 (2006); S. Mishra, "Risks, Farmers' Suicides and Agrarian Crisis in India: Is There A Way Out?" In Indira Gandhi Institute of Development Research. Mumbai: Working Paper, 2007; Ministry of Finance: Report of the Expert Group on Agricultural Indebtedness. New Delhi: Government of India (2007); Planning Commission, "*Report of Fact Finding Team on Vidarbha: Regional Disparities and Rural Distress in Maharashtra with Particular Reference to Vidarbha*", New Delhi: Government of India (2006); N. Deshmukh, "Cotton Growers: Experience from Vidarbha", in *Agrarian Crisis and Farmer Suicides* (eds) Deshpande RS, Arora S. New Delhi: Sage (2010), 175-191.

[6] P. Sainath, "The Farm Crisis. Why Have Over One Lakh Farmers Killed Themselves in the Past Decade?" Speakers' Lecture Series: Parliament House, New Delhi, September 6 (2007).

(IJASSH) 2016, Vol. No. 2, Jul-Dec **e-ISSN: 2455-5150, p-ISSN: 2455-7722**

While there is no single reason for the suicides, rural indebtedness emerges as one of the primary drivers. 70% of small farmers lost their landholdings as collateral in Vidarbha district for loans they can seldom hope to repay.[7] 83% of Andhra Pradesh farmers were in debt, according to a report of the National Sample Survey Organization (NSSO) based on farm household surveys (2003). [8] Studies conducted by the Tata Institute of Social Sciences, the Indira Gandhi Institute of Development Research, Mumbai (IGIDR, the Deccan Development Society (DDS) and the AP Coalition in Defence of Diversity (APCDD), Gene Campaign, point to the vicious cycles of crop failure, high input costs of seeds like Bt cotton, farmer indebtedness and farmers' suicides.

It is the vast gap between two worlds – a putative world of legal persons, lawful relations and the disenfranchised world of small farmers that drives this study of farmers' rights. Particular rights regimes have their own internal dispensations, assumptions and expressions and need to be interrogated in terms of their own particular discursive settings. It is not to undermine, much less to eschew the discourse of rights, when I propose that while rights are necessary juridical tools to protect, assert and claim, they may not function as a sufficient condition or as a telos for justice seeking projects, as they do not in the case of biocultural entitlements of farmers

FARMERS' RIGHTS

The concept of farmers' rights (FRs) was first developed in response to the extension of intellectual property (IP) rights to agriculture. Before IP claims over plant varieties began to be made, there was no legal conception of farmers' rights. Once the two main international instruments of plant-variety protection and breeders' rights – the International Union for the Protection of New Varieties of Plants (UPOV) Conventions (1961, 1978, 1991) and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS, 1995) – were established, it began to be argued that they broaden the gap substantially between source crop materials and improved varieties in terms of their value and the ownership rights attached to them. These agreements recognise the claims of the breeders and inventors to ownership of improved varieties, and protect those claims through IP rights, leaving farmers – the traditional breeders and conservers of crop varieties – outside the domain of IP rights in agricultural

[7] Bt cotton increased farmers' indebtedness in Vidarbha: Gene Campaign study [http://www.infochangeindia.org/AgricultureItop.jsp?section_idv=10]

[8] National Sample Survey Organisation's "Situation Assessment Survey of Farmers." Also see, Devinder Sharma, "Farm Incomes And Costs: Returns from Farming" Available at http://www.foodpolicy.in/html/incomes/incomes.htm (last visited 5 June 2014)

(IJASSH) 2016, Vol. No. 2, Jul-Dec **e-ISSN: 2455-5150, p-ISSN: 2455-7722**

bio-resources and associated knowledge. It was this omission that spawned the debate about farmers' rights and the movement for their formal recognition and institutionalisation.

There were persuasive arguments in favour of FRs, articulated at various levels. In sum it was recognition that while the commercial breeders were protected by either plant breeders' rights (PBRs) or through patents in plant varieties, the farmers' contributions, as preservers and developers of the gene pool (on which was based much of the incremental changes that were made by commercial breeders) also needs to be rewarded and protected.[9] The UN body, FAO (Food and Agriculture Organization) emerged as one of the main instruments that provided guidelines to national governments for granting expression and content to the farmers'. The International Treaty on Plant Genetic Resources for Food and Agriculture,, referred to as the Plant Treaty, was approved on 3 November 2001 by Members of the FAO. Based on precedents set by the FAO's International Undertaking (precursor of the Plant Treaty) and the Convention on Biological Diversity (CBD), the Plant Treaty established standards for the international exchange of plant genetic materials for food and agricultural uses. The FAO, the CBD, the Plant Treaty in general reflect policy changes at the international level with regard to use of plant genetic resources for food and agriculture and with respect to the location of FRs within the matrix of rights associated with the use and exchange of plant genetic material.[10]

While the changing rhetoric on farmers' rights provided a framework within which, in India, a pitch for farmers' rights could be made in consonance with WTO's TRIPS,[11] the more immediate impetus was provided by farmer's movements in parts of India from the early 1990s, against moves to globalise agriculture in general and against the privatisation of the seed industry in particular. The Plant Variety Bill initially introduced into the Indian Parliament in December 1999 contained only a short provision on farmers' rights. [12] The campaigns of Bija Satyagraha in 1993 and 1998 – using a Gandhian mode of protest symbolising seed sovereignty – changed that. Nearly half a million farmers, mobilised principally by the prominent farmers' organisations Navdanya, and Karnataka Rajya Raitha Sangha (KRRS),

9 See, for e.g., GRAIN, Plant Variety Protection to Feed Africa?', 16/4 Seedling 2 (1999)
10 For details see, Philippe Cullet, IP Protection and Sustainable Development, Ch. 3.
11 TRIPS Article 27.3(b) allows governments to exclude some kinds of inventions from patenting, i.e. plants, animals and "essentially" biological processes (but micro-organisms, and non-biological and microbiological processes have to be eligible for patents). However, plant **varieties** have to be eligible for protection either through patent protection or a system created specifically for the purpose ("sui generis"), or a combination of the two.
12 An interesting mutation of citizenship took place here: farmers – citizens of India – were not represented during the JPC's public consultations on the bill, yet the US company Monsanto was invited by the JPC to make an oral submission in 2000, and was the only individual company which did so [Government of India, JPC, 2000].

participated in a rally against the seed corporations at the Cuban Park in Bangalore[13]. This demonstration of farmers' anger was perhaps instrumental in shifting the terms of the proposed bill. A whole new chapter on farmers' rights was added to the Bill in 2000 which gave farmers' entitlements a juridical status.[14] Thus came into being a unique two-way protection that not only provided plant variety protection for the breeders but also granted rights to farmers over their plant varieties. It was a tacit acknowledgement that farmers are as much holders of intellectual property as the modern biotechnologically-assisted plant breeders are.

The law thus emerged from a process that attempted to incorporate the interests of various stakeholders, including private-sector breeders, public-sector institutions, non-governmental organisations and farmers, within the property rights framework.
Accommodating these twin purposes meant recognising the proprietary claims of both the farmers and the breeders – in fact, recognising farmers *as* breeders. Dual protection, it was argued, would be likely to facilitate the growth of the seed industry, which would ensure high-quality seeds and planting material were available to farmers, as well as protect the stewardship claims and property interests of the farmers.

THE CONTENT OF FARMERS' RIGHTS

The content of farmers' rights is quite extensive and includes virtually every claim that a farmer may have. They fall into two broad groups: property rights (negative rights that protect a farmer's liberty and autonomy) and privileges and immunities (positive rights that place an obligation on corporations and the government for benefits and compensation).

Property rights

- The right to save, use, exchange, share and sell farm produce of a protected variety, except sale of branded variety.[15]

[13] Navdanya, "Bija Satyagraha'. Available at http://navdanya.org/campaigns/bija-satyagriha (last visited 21 June, 2014); See email exchange between Lawrence F. London, Jr., of *American Spectator* magazine and Vandana Shiva on Friday, 8 October 1999.
[14] Lok Sabha Secretariat, 2000. Joint Committee on the Protection of Plant Varieties and Farmer's Rights Bill 1999. Report of the Joint Committee.
http://openlibrary.org/books/OL3975683M/Joint_Committee_on_the_Protection_of_Plant_Varieties_and_Farmers'_Rights_Bill_1999; For a discussion see, Susette Biber-Klemm and Thomas Cottier et al, "The Current law of Plant Genetic Resources and Traditional Knowledge", In Susette Biber-Klemm and Thomas Cottier (eds), *Rights to Plant Genetic Resources and Traditional Knowledge* (Cabi, 2006), 90-93
[15] PPVFR Act, Section 39(1)(iv)

(IJASSH) 2016, Vol. No. 2, Jul-Dec **e-ISSN: 2455-5150, p-ISSN: 2455-7722**

- Farmers who get recognised as breeders can register their varieties and will then have the power to authorise and regulate the use of such varieties.[16]
- Claims to benefit sharing if their registered varieties and landraces have been used for deriving new varieties.[17]

In sum, the farmers' rights component of the Protection of Plant Varieties and Farmers' Rights Act, 2001, focuses on assigning intellectual property rights to farmers that give them the right to commercialise their knowledge rather than merely to stop others from commercialising it.

Privileges and immunities

- Farmers are to be compensated if the performance of propagating material is below what has been claimed by the breeder.[18]
- They are entitled to recognition and reward from the National Gene Fund for any contribution they make towards the evolution of a variety.[19]
- Farmers are to be protected from penal action for acts of innocent infringement.

We see two kinds of claims are endorsed here:

- individuated *authorial* claims of the farmer which recognise the farmer as the author of his varieties
- the *collective stewardship claims* of farming communities.

While farmers' authorial claims are clearly located within the property framework and derive from ownership narratives, privileges and immunities are iterations of the socio-economic and cultural location of certain farmer groups as stewards of biogenetic resources who are being rendered vulnerable through their induction into the nexus of the market.

The PPVFR Act is a definite advance over the UPOV formulation of farmers' 'privilege', and within it the progressive delimitation of the farmers' privilege to save and exchange seeds. By replacing the notion of privilege with that of rights, the PPVFR Act makes an important political move, confirming the plural and local epistemic and cognitive systems that exist. Then, by including within the scope of farmers' rights a farmer's right to save, exchange, re-sow and sell (in a limited manner), it affirms the plural economic spaces of commodity exchange.

The language of "rights" helps to express farmers' claims in more concrete terms. It establishes the entitlements of the farmers in more determinate and concrete terms.. Keith Syrett, examining how the

[16] Ibid, Section 2(c)
[17] Ibid, Section 2(b); Section 39(1)(ii)
[18] Ibid, Section 39(2); Section 41(3)
[19] See, PPVFR ACT, 2001, Section 2(k)(l); Section 39(1)(iii)

language of privileges is used for British labour union activity, sums it up succinctly when he states that, language (or discourse) is 'a bearer of political content', which carries within it the perspective or 'world-view' of the user. [20] However, while adherence to the keyword, "rights" is a necessary condition, it is by no means a sufficient condition for its fulfilment and accessibility. In what follows, I examine two issues central to farmers' rights which illustrate how these rights are realised, what is going wrong, and why so many farmers have been driven to suicide in the decade since the PPVFR legislation.'

To understand this curious disjuncture of events one needs to understand the jurisdiction and the location of the legal claim called farmers' rights.. Let me pick the main sticks in the FRs bundle to demonstrate how the law defeats the very stated ambition on which it rests.

THE RIGHT TO SELL

While the right to sell, save and reuse, are extremely important sticks in the bundle of property rights, they hide other discrete processes which encroach upon FRs. For example, the right to sell applies typically to open-pollinated and inbred plant varieties – the kinds developed by farmers – the seeds of which can be replanted over and over again, saved and then either sold or exchanged. However, hybrid seeds that are artificially cross-pollinated and bred to favour desirable characteristics like higher yield, more uniform size etc., are programmed in such a way that seeds produced from hybrid plants lose their hybrid vigour due to the concept of segregation: new seeds must be purchased every planting season. Kochupillai states that hybrids have a 100% seed replacement rate, meaning that in order to maintain the quality and quantity of produce, seeds have to be purchased afresh from the market every season.[21] Between 2002 and 2011, Dravid states that the major drivers of growth for the seed industry in India were the single-cross maize hybrids, Bt cotton hybrids, hybrid pearl millet, hybrid rice and hybrid vegetables developed by the private sector.[22] Needless to add, these seeds are not the ones to which a farmer's right to sell applies.

According to estimates, the hybrid seed market has grown at a stupendous compound annual growth rate of 36.1% over the period 2007–13.[23] The contribution of varietal seeds to the overall commercial seed

[20] Keith Syrett, " 'Immunity', 'Privilege', and 'Right': British Trade Unions and the Language of Labour Law Reform", *Journal of Law and Society*, Vol. 25, No. 3 (Sep., 1998), 389

[21] M. Kochupillai, "India's Plant Variety Protection Law: Historical and Implementation Perspectives", International Max Planck Research School for Competition and Innovation
Max Planck Institute for Intellectual Property and Competition Law (2011) 93

[22] Dravid (2011) 'Future Growth Drivers for Indian Seed Industry', Indian Seed and Planting Material 4: 41-45. Quoted from B.L Manjunatha et al, "The Legal Protection of Public and Private Plant Varieties in India: A Comparative Analysis", J Bioremed Biodeg (2013), 4

[23] CAGR – Compound Annual Growth Rate.

market in India has fallen steeply from 72% in the same period.[24] The effect is that farmers now must purchase new seeds every planting season, ensuring that technology defeats the seed rights they have been granted by the PPVFR Act.

FRs thus get diluted with developments in technology such as the hybrid, terminator, and other biotechnology products. The rights to save, sell, use and exchange are all compromised through the deployment of technology and innovation. From coupling the narrative of ownership and property with that of innovation, one outcome is to render conventional ownership norms less significant than before.

CLAIMING INNOVATION

The PPVFR Act grants plant variety protection for *new varieties* (largely modelled on UPOV), *farmers' varieties*, *extant varieties*, and *essentially derived varieties*. All four types of varieties can be registered, reflecting the interests of various breeders and their authorial identity. Adopting UPOV-style protection, the PPVFR Act prescribes DUS standards – distinctiveness, uniformity and stability – for all varieties (including extant and farmers' varieties) as criteria for registration and protection. In other words, the Act affirms the cultural and socio-economic status of the farmers in theory, but undermines it in practice by subjecting it to universalised, homogenised validation criteria.

FVs tend to be relatively internally homogenous, each variety maintaining unique identities drawn from a history governed by environmental, taste, and commercial considerations. In fact, farmers may deliberately retain some heterogeneity to cushion against environmental aberrations and changing consumer preferences. The selection criteria farmers follow differ markedly from those that govern proprietorial and innovation claims. Saxena and Singh argue that along with environmental and biological factors, there are social, cultural and economic reasons why farmers select for variety in the strains they propagate. They state that '[m]ost cultivars have been selected and cultivated because they meet human requirements and please the farmer.'[25] This means that it is entirely possible that the special features that plant varieties have are matters of observable preference and that farmers may not have varieties with spectacular morphological variations (Nagarajan et al, 2008; Saxena and Singh, 2006; Kochupillai, 2011). While commercial breeders may be successful in getting their varieties protected under the Act, because of the built-in antiquity, farmers may not be able to do so as he may not be able to meet the criteria of *distinctness, uniformity and stability*, borrowed uncritically from the UPOV

[24] http://www.kenresearch.com/agriculture-food--beverages/agriculture/india-seed-industry-research-report/372-104.html?m=agriculture-food--beverages&id=agriculture&n=372-104&A=India-Seed-Industry-Outlook-to-FY2018

[25] S. Saxena and A. Singh, " Revisit to Definitions and the Inventorization or Registration of Landrace, Folk, Farmers' and Traditional Varieties", *Curretn Science* vol 11, (10 December, 2006), 1451

convention for the registration of breeders' varieties. Contrast this with plant breeders, who conduct mass selections to breed varieties which excel in performance, and bypass the trials and selections that a farmer conducts over many years before he achieves a respectable yield in a particular place, using specific farming techniques.[26] Srinivasan (2003) concludes that FRs approaches based on intellectual property rights are unlikely to provide significant economic returns to farmers or farming communities.

A look at some of the data compiled in the *Plant Variety Journal of India* and Annual Reports of the Protection of Plant Varieties and Farmers' Rights Authority corroborates that farmers' varieties lag behind new varieties and extant varieties, if registration is taken as a criterion to judge the innovation potential of varieties.

Items	New Varieties	Extant Varieties	Farmers' Varieties	EDVs	Total
Number of PVP applications received by the authority	1,517	2,059	3,081	108	6,765
% Share to total PVP applied	22.42%	30.44%	45.54%	1.60%	100.00%
Number of Certificates of Registration granted	115	729	69	1	914
% Share to total Certificates of Registration granted	12.58%	79.76%	7.55%	0.11%	100.00%

Table 1: No. of applications seeking plant variety protection (PVP) and number of Certificates of Registration (CoR) granted.
Source: Compiled from "Application Details" published by Protection of Plant Varieties and Farmers' Rights Authority (31 March, 2014).

It is interesting to note that even though farmers' varieties have recorded the highest number of applications (largely due to a spurt between March 2012 and March 2014), they register the lowest number of certificates granted. Before it jumped to 7.55% in March 2014, till September 2012, the percentage share of total CoR granted was only 1.23% (Manjunatha, 2013, 2). More revealing is the fact that almost all farmers' variety registrations have been for rice (two for wheat). Rice is a self-pollinating crop with a low seed replacement rate. Conversely, new varieties registered have been for hybrid varieties of maize, sorghum, pearl millet and most for tetraploid cotton, which have a negligible seed replacement rate and for which therefore a farmer must source seed from the market. 88% of the New

[26] S. Nagarajan et al, "Farmers' Variety in the Context of Plant Variety Protection and farmers' Rights Act, 2001", *Current Science* vol 94, no. 6 (25 March, 2008), 211

Varieties (NV) have been registered by private sector companies, including transnational corporations such as Monsanto, Bayer, Syngenta and Pioneer.[27]

Several studies affirm the conclusions that emerge from the data presented above (Nagarajan et al, 2008; Saxena and Singh, 2006; Kochupillai, 2011, Srinivasan, 2003, Manjunatha et al, 2013). Manjunatha et al conclude their study by stating that 'India is the first country in the world to grant registration to farmers' varieties. Yet it has a long way to go in achieving the objective of upholding farmers' rights.'[28] Kochupillai suggests that given farmers' discouraging filing trends, greater effort must be made to educate them about their rights under the Act and to encourage informal farmland innovation, since they have no access to modern scientific research and development.

Is it then only a matter of educating the subjects of the law to claim their stakes and rights? Can the substantial exclusion of farmers from the law and technology be altered? While education will of course help farmers gain access better to the law and technology, I would point out that the gap between farmers' rights and farmers' access to those rights is located within the very concepts of property and rights on which they are based.

By reducing the study of high-technology property to simple questions of law and technology, we are ignoring the fact that farmers' rights are simultaneously being defined in terms derived from scientific life and laboratory practices, and from the formal categories and the informal imperatives of the law. The criteria for understanding innovation, and the legal claims over property that relate to those criteria, combine to produce two kinds of institutionalisation. The first is *inside* the practice of law and technology, and establishes what constitutes innovation (i.e new scientific practices and new, genetically modified and hybrid varieties). The second, however, is excluded, or *outside*, and relates to cognitive and epistemic practices that are culturally distinct and that do not emerge from the practice of big science. But as R. Whitley points out, the institutionalization of cognitive practices becomes a constitutive element of social institutionalization as well.'[29] Cognitive structures exist in scientific consciousness and provide a general world view which integrates scientific activity with other systems of production and appropriation. [30] The critical difference is that the former – institutionalisation of technology-led innovation – is simultaneously rendered capable of producing knowledge and of governing

[27] One of the problems with agricultural biotechnology, writes Chandrashekaran, is that its methods and products are increasingly being patented and licensed to the private sector. Patent rights, breeders' rights in each incremental improvement in a crop means 'successive layers of IPR "accumulate" such that the germ is "highly IP encumbered".' Chandrashekaran et al, 513

[28] ////

[29] R. Whitley, 'Cognitive and Social Institutionalization of Scientific Specialties and Research Areas', in Social Processes of Scientific Development, R. Whitley (ed.), (London, Routledge & Kegan Paul,1974).

[30] Ibid, 41

appropriation, and the latter – traditional farming practices – enact the routines of subsidiary, secondary rights.

Farmers' rights in India, may display the rhetorical and semantic facade of property rights, but their deceptive narrative of innovation and rights is foreign, and renders more conventional property claims ineffective. The terrain of overlapping rights – breeders' rights with farmers' for "essentially derived varieties (EDVs),[31] farmers' rights with breeders' for benefit sharing, farmers' rights with the state for compensation and benefits – demands hard bargaining and negotiating skill. Given the average farmer's limited access to legal resources and the culturally alien terms in which negotiations are conducted, the bargaining is inevitably asymmetrical. It is no surprise that there have been no benefit-sharing claims from farmers even though EDVs have been registered. Of course the location of the farmer impedes such claims but more importantly, parental lines of new hybrid varieties are difficult to identify making even the idea of benefit sharing notional.

Benefiting from trade, as Graham Dutfield suggests, 'depends not only on the availability of legal rights that are enforceable beyond the locality, but also on the *ability* of traditional communities to take advantage of national and international law including property and access rights relating to land, natural resources and intellectual property.' [32] When different groups in the politico-economic matrix of agriculture have access to vastly different levels of resources, knowledge and expertise, the ownership and control of plant varieties have the potential to re-define relations among them.

CONCLUSION

There can be two readings of the PPVFRA Act. The first focuses on the conceptual strides made by the Act which carved out a semantic and material space inside which farmers could assert their claims. It regards – and rightly so– the legislation as important for a variety of reasons. First, it is a unique legislation that pushes the idea of IP protection beyond the conceptual categories of intellectual property rights such as patents and breeders' rights (Cullet 2005). It affirms the juridical veracity of knowledge and farming systems that had come to acquire an 'alternative' status. It gives credence to the conception

[31] Varieties which are essentially derived from the protected variety, where the protected variety is not itself an essentially derived variety, are known as EDVs. See UPOV definition, available at http://www.upov.int/edocs/expndocs/en/upov_exn_edv_1.pdf

[32] Graham Dutfield, "Protecting Traditional Knowledge: Pathways to the Future", *International Centre for Trade and Sustainable Development (ICTSD)* (2006), 7

that farmers are as much bearers of intellectual property their modern biotechnologically assisted plant breeders.

Second, the idea that farmers' traditional knowledge and biogenetic resources need protection through property rights, derives from a recognition of the vital link between knowledge and livelihood rights (Chandra, 2010). Third, the Act affirms the authorial status of farmers as breeders by regarding a breeder as 'any person or group of persons or a farmer or group of farmers or any institution which has bred, evolved or developed any variety…' (Rangnekar, 2013).

The Indian Act is also important because it attempts to move beyond the rhetoric of farmers' claims and contributions and attempts to fill out its content in terms of farmers' rights to save, use and exchange seeds and propagating material, and attempts to enable farmers to claim special forms of intellectual property rights over their varieties.

However, even though the legislation affirms the authorial status of farmers as breeders, and even though it includes farmers' seed rights, farmers remain excluded from the formal and informal practices of plant variety protection law. This is the curious case of farmers' rights in India. *Prima facie*, the PPVFR Act can be seen as combining three discursive modalities – that of *stewardship* (the right to rewards and benefit sharing), *ownership* (the right to save, sell, re-use and exchange) and *innovation* (the right to register seeds that meet the DUS standards).

How can we read this capacious, if complicated, articulation of an ethico-political gesture which is simultaneously wrapped in the vocabulary of stewardship, culture, history, and of property, innovation, efficiency? Is there a double movement here whereby, drawing from Lefort (1988:11), the content and intent of these rights simultaneously appear and are obscured? What are made apparent through the formal language of the law, are farmers' rights that seem to incorporate generational, ownership and innovation claims. But what is obscured is the locus of politics (the locus in which parties compete and in which certain kinds of agency are reproduced and other kinds subverted), and the general principles, or the serving criterion that govern the overall configuration.

The key to understanding the locus of politics lies in – to draw from the analytical frame developed by Goodman, Sorj, and Wilkinson (1987) – the twin processes of 'appropriationism' and 'substitutionism'. The former signals the coalescing of pre-existing biophysical processes of production with new *processes* derived from industrial, scientific and business domains, giving rise to, or substituting old (agricultural) *products* with new (industrial) products. Hybridisation, genetic modification and engineering of seeds like Bt cotton displace older processes of saving and planting, substitute older seeds with new monocultures of seeds, altering the very cycle of agriculture and the location of the farmer.

(IJASSH) 2016, Vol. No. 2, Jul-Dec **e-ISSN: 2455-5150, p-ISSN: 2455-7722**

Together they result in a discontinuous but persistent undermining of discrete elements of the agricultural production process and end-products, reducing both the process and the products into commoditised inputs for manufactured products (1987, 2).

Hybridisation, the genetic modification of seeds – typical examples of appropriationism and substitutionism – limit not just the propensity of the seed to self-replicate, but also circumscribe conventional ownership claims and farmers' seed rights. A farmer's right to save, re-use, sell and exchange are of little worth when the seeds are technologically inert or have deficient propagation capacity. Technological interventions, together with the legal paraphernalia of multiple, imbricated property rights, reconstitute ownership so that old forms of it, without S&T led innovation, are rendered powerless to protect or remunerate. This politics of substitutionism and appropriation is what makes farmers' rights a curious case – despite the law's content and explicit intent.

BIBLIOGRAPHY

1. Becker, Lawrence C., *Property Rights, Philosophical Foundations* (London: RKP, 1977).
2. Borowiak, C. , 'FRs: IP Regimes and the Struggle over Seeds', *Politics and Society*, 32, 4 (2004)
3. Chandrashekaran, S., Vasudev, S., "Indian Plant Variety Protection Act Benficiaries: The Indian Farmer or the Corporate Seed Company?" *Journal of Intellectual Property Rights,* Vol 7 (Nov, 2002)
4. Cottier, Thomas, Susette Biber-Klemm and et al, "The Current law of Plant Genetic Resources and Traditional Knowledge", In Susette Biber-Klemm and Thomas Cottier (eds), *Rights to Plant Genetic Resources and Traditional Knowledge* (Cabi, 2006)
5. Cullet, Philippe and Radhika Koluru, Plant Variety Protection and FRs: Towards a Broader Understanding. 24 *Delhi Law Review* (2003).
6. Deshmukh, N., "Cotton Growers: Experience from Vidarbha", in *Agrarian Crisis and Farmer Suicides* (eds) Deshpande RS, Arora S. New Delhi: Sage (2010), 175-191.
7. Deshpande, R. S., and S. Arora (eds): *Agrarian Crisis and Farmer Suicides*. (New Delhi: Sage, 2010)
8. Devinder Sharma, "Farm Incomes And Costs : Returns from Farming" Avaialble at http://www.foodpolicy.in/html/incomes/incomes.htm
9. Dutfield, Graham, "Protecting Traditional Knowledge: Pathways to the Future", International Centre for Trade and Sustainable Development (ICTSD) (2006)
10. Dutfield, Graham, *IP Rights and the Life Cycle Industries* (Aldershot: Ashgate, 2003)

11. Gene Campaign, "Bt Cotton Increased Farmers' Indebtedness in Vidarbha". http://www.infochangeindia.org/AgricultureItop.jsp?section_idv=10
12. Kloppenburg, Jack "Social theory and the de/reconstruction of agricultural science: local knowledge for an alternative agriculture," *Rural Sociology* 56 (4) (1991).
13. Kloppenburg, Jack, "*Seeds and Sovereignty: The Use and Control of Plant Genetic Resources*,". (London: Duke University Press, 1988); J.
14. Kochupillai, M, "India's Plant Variety Protection Law: Historical and Implementation Perspectives", Max Planck Institute for Intellectual Property and Competition Law (2011)
15. Lewontin, R., "The Maturing of Capitalist Agriculture: Farmer as Proletarian," Monthly Review. 50(3) (July/August 1998)
16. Lok Sabha Secretariat, 2000. Joint Committee on the Protection of Plant Varieties and Farmer's Rights Bill 1999. Report of the Joint Committee. http://openlibrary.org/books/OL3975683M/Joint_Committee_on_the_Protection_of_Plant_Varieties_and_Farmers'_Rights_Bill_1999
17. Manjunatha, B.L et al, "The Legal Protection of Public and Private Plant Varieties in India: A Comparative Analysis", *J Bioremed Biodeg* (2013).
18. Ministry of Finance: Report of the Expert Group on Agricultural Indebtedness. New Delhi: Government of India (2007).
19. Mishra, S. "Risks, Farmers' Suicides and Agrarian Crisis in India: Is There A Way Out?" In Indira Gandhi Institute of Development Research. Mumbai: Working Paper (2007).
20. Mishra, S., "Farmers' Suicide in Maharashtra" *Econ Pol Wkly* No. 41 (2006);
21. Mohanty, B.B. "We are like the living dead: Farmer Suicides in Maharashtra, Western India", *J Peasant Stud* (2005)
22. Nagarajan, S. et al, "Farmers' Variety in the Context of Plant Variety Protection and Farmers' Rights Act, 2001", *Current Science* Vol 94, no. 6 (25 March, 2008).
23. Navdanya, "Bija Satyagraha'. Available at http://navdanya.org/campaigns/bija-satyagriha
24. Planning Commission, "Report of Fact Finding Team on Vidarbha: Regional Disparities and Rural Distress in Maharashtra with Particular Reference to Vidarbha", New Delhi: Government of India (2006).
25. Protection of Plant Varieties and Farmers' Rights Act, 2001
26. Ramanna, Anitha, FRs in India: A Case Study. FNI report 6/2006
27. Sainath, P. "Farmers' suicide rates soar above the rest", The Hindu, May 18, 2013;
28. Sainath, P. "The Farm Crisis. Why Have Over One Lakh Farmers Killed Themselves in the Past Decade?" Speakers' Lecture Series: Parliament House, New Delhi, September 6 (2007).
29. Saxena, S. and A. Singh, " Revisit to Definitions and the Inventorization or Registration of Landrace, Folk, Farmers' and Traditional Varieties", *Current Science* Vol 11, (10 December, 2006).

30. Seshia, S. “Plant variety protection and farmers. Rights: Law-Making and cultivation of varietal control”. Economic and Political Weekly, July 6, 2002
31. Srinivasan, C.S., “Concentration in the Ownership of Plant Variety Rights: Some Implications for Developing Countries”, *Food Policy* 28, (2003)
32. Srinivasan, C.S., “Exploring the Feasibility of Farmers' Rights” *Development Policy Review* 21 (4) (Jly, 2003)
33. Suman Sahai, “Access to Agrobiodiversity means food for the Rural Poor,” GeneNews. Vol. 1 No.3 (Nov-Dec.2006).
34. Syrett, Keith, “ 'Immunity', 'Privilege', and 'Right': British Trade Unions and the Language of Labour Law Reform”, *Journal of Law and Society*, Vol. 25, No. 3 (Sep., 1998).
35. The Sanhati Collective, “Farmers’ Suicides in India: A Disaster of Epic Proportions”, 15 Jan (2012).
36. TISS Report (Dandekar et al, 2005),
37. Vasavi, A.R., Shadow Space (Gurgaon: Three Essays Collective, 2012)
38. Whitley, R. ,‘Cognitive and Social Institutionalization of Scientific Specialties and Research Areas’, in R. Whitley (ed.), *Social Processes of Scientific Development* (London, Routledge & Kegan Paul,1974).